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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,090	06/30/2003	Jean-Marie Bernard	004900-195	8126

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EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,090

Applicant(s)

BERNARD, JEAN-MARIE

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/18/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The Election of Species Requirement of December 13, 2004 has been withdrawn.
2. Claims 31-34, 38, 48, and 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Firstly, the examiner has not found clear support for the subject matter of claims 31-34. It is requested that applicants indicate where support may be found within the specification.

Secondly, with respect to claim 38, adequate support for claiming that the lactams and oximes may be substituted has not been found.

Lastly, within claims 48 and 49, adequate support has not been found for the embodiments where non-isocyanate functional compounds are reacted with the compound of formula (II). As claimed, there is no requirement that the compounds that react with the compound of formula (II) be isocyanate functional; however, the examiner has not found adequate support for these embodiments.

3. Claims 36, 48, and 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Firstly, with respect to claim 36, applicants have failed to specify the type of molecular weight (i.e.; number average or weight average). This information is necessary to adequately identify the compound.

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Secondly, with respect to claims 48 and 49, applicants have failed to provide adequate enablement for the claimed embodiments where non-isocyanate functional compounds are reacted with the compound of formula (II). As claimed, there is no requirement that the compounds that react with the compound of formula (II) be isocyanate functional; however, applicants have failed to teach how such reactions may proceed.

4. Claims 23-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, it is unclear if references to “crosslinking functional group” (claims 30 and 34), “crosslinking functionality” (claim 33), and “crosslinking group” (claims 45, 50, and 52) refer solely to the cyclic carbonate groups as depicted within formula (I). It is unclear if the language provides for other types of crosslinking groups. This issue is especially pertinent to claims 30, 33, and 50 because it is unclear if the “crosslinking” language refers to a group other than the aforementioned cyclic carbonate. Since the polyisocyanates of claim 23 possess the cyclic group, it is unclear if the “including” and “bearing” language requires the presence of additional crosslinking groups.

Secondly, the language, “hydrocarbon-based” (claims 23 and 24), and the language, “polymers and reticulates based on ...” (claim 55), render the claims indefinite, because it is unclear to what extent the compounds or compositions are “based” on or derived from the recited compounds or components.

Thirdly, within the definition of X within claim 23, it is unclear what is meant by “optionally after decarboxylation”. The significance of the language is unclear and it cannot be clearly determined what is being subjected to decarboxylation.

Fourthly, within claim 31, glycerol and 1,9,10-trihydroxyoctadecane are not diols.

Fifthly, within claim 32, the parentheses are incomplete for the carbonylbis(methyl ethyl ketoxime) species. Within claim 34, the language, “the crosslinking functional group”, lacks antecedence. Also, the species, fatty acid carbonate or ester thereof, is not further limiting of claim 33.

Sixthly, within claim 41, the significance of the language, “respectively”, is unclear.

Seventhly, with respect to claims 43 and 44, it is unclear if the claims are directed to modified polyisocyanates produced from the reaction of an unmodified polyisocyanate with a compound of formula (II) or further modified polyisocyanates produced from the reaction of the modified polyisocyanates with a compound of formula (II).

Eighthly, within line 2 of claim 49, the language, “in any order”, is not understood in view of applicants’ use of “simultaneously”, “successively”, and “simultaneous”. Furthermore, no distinction is seen between the simultaneous steps b) and a₂).

Ninthly, within claim 50, the meaning and significance of the word, “predominantly”, is unclear.

Tenthly, within claims 51-54, the word, “thin”, is subjective. It is unclear what quantitatively constitutes “thin” coatings; therefore, it is unclear what patentable distinction is conveyed by the language.

Lastly, within claim 52, the language, “the crosslinking group”, lacks antecedence.

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 23-28, 30, 31, 33-37, 42-46, 48, and 50-59 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 00/55263.

The reference discloses the reaction product of polyisocyanate, including biuret or isocyanurate derivatives, with a hydroxyl functional cyclic carbonate, such as glyceryl carbonate. See page 7, lines 13+ and page 8, lines 19+. The reference further discloses that these reaction

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products are combined with additional polyisocyanates, including masked polyisocyanates, and melamine to yield a coating. See abstract; page 4, lines 18+; and pages 5-8.

7. Claims 39, 47, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/55263.

As aforementioned, the reference discloses the reaction product of polyisocyanate, including biuret or isocyanurate derivatives, with a hydroxyl functional cyclic carbonate, such as glyceryl carbonate, and coatings comprising these reaction products, additional polyisocyanates, including masked polyisocyanates, and melamine. Though the reference is silent regarding the use of mixtures of blocking agents, the reference discloses multiple species of blocking agents; therefore, the use of a plurality of blocking agents would have been obvious to the skilled artisan. With respect to the subject matter of claims 47 and 49, the position is taken that it would have been obvious to combine and react the disclosed blocking agents, polyisocyanates, and hydroxyl functional cyclic carbonates, so as to arrive at applicants' process and the claimed polyisocyanate composition. This position is logical in view of the fact that the reference teaches that both blocking agents and the carbonates are reactants for the polyisocyanates.

8. Claims 23-27, 35, 48, 51, 52, 55, 56, and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by XP-002123895.

The reference discloses the reaction of polyisocyanates with cyclic carbonates having an isocyanate reactive substituent attached to the ring, and the use of the resulting product within coatings. See abstract.

9. Claims 23-27, 30, 31, 33-36, 48, 51, 52, 55, 56, and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 337926.

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The reference discloses the reaction of polyisocyanates with cyclic carbonates having an isocyanate reactive substituent attached to the ring, and the use of the resulting product within coatings. See abstract and page 15.

10. Claims 23-27, 30, 31, 33-35, 42, 45, 47, 48, 50, 55, 56, and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 419114.

The reference discloses the reaction of polyisocyanates with cyclic carbonates having an isocyanate reactive substituent attached to the ring, and the use of the resulting product within polymers. See abstract and page 3, lines 1-8.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent
March 31, 2005